

## REMARKS

Claims 1, 2, 4-6, 9 and 18-20 are presently pending. Of these, Claims 19 and 20 are withdrawn from consideration. Claim 1 has been amended to recite that a plurality of components are present. This amendment has been made solely to emphasize that more than one component having the recited features is present in the claimed composition. No change in scope is intended, as the claim already recited the term “components” in the plural. The limitation that the extract is substantially devoid of components having a molecular weight greater than 10 kDa is supported by Figures 2 and 4, as well as in the accompanying description in Applicants’ specification at page 27, lines 15-27. Thus, no new matter is presented by the amendments.

The following addresses the substance of the Office Action.

### Anticipation

Claims 1-6 and 9 were rejected under 35 U.S.C. § 102(b) as being anticipated by Weng et al. (2001, *Acta Pharmaceutica Sinica* 36:817-820). Weng et al. teaches that total velvet antler polypeptides (TVAP) accelerated skin wound healing by stimulating proliferation of epidermal cells. The biological activity on epidermal cell proliferation and wound healing were found to be mainly due to native velvet antler polypeptide (nVAP), which has a molecular weight of 3,216 daltons. The Examiner indicated that statements of inherent properties, intended use, or purpose are not limiting to the interpretation of claims, and thus, the present claims are just directed to an extract of deer velvet proteins, which has a molecular weight less than or equal to 10 kDa. However, the limitation regarding the ability to “induce proliferation of endothelial cells and/or promote angiogenesis” does not merely state an inherent property of the recited components. Rather, the limitation sets forth distinct requirements of the claimed composition. In particular, Figures 2-4 of the present specification establish that there are numerous components present in deer velvet that have a molecular weight of less than or equal to 10 kDa. Included among these numerous components are several that may be responsible for inducing proliferation of endothelial cells and/or promoting angiogenesis. Accordingly, as discussed above, the claims have been amended to emphasize that the extracts contain a plurality of components.

To be anticipatory under 35 U.S.C. § 102, a reference must teach each and every element of the claimed invention. See *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1379 (Fed.Cir. 1986). “[A]nticipation requires that all of the elements and limitations of the claim are found within a single prior art reference.” See *Scripps Clinic & Research Foundation*

*v. Genentech, Inc.*, 927 F.2d 1565 (Fed. Cir. 1991). Whereas Weng et al. teaches either 1) total velvet antler peptides (TVAP), or 2) a single isolated peptide of about 3.2 kDa ((nVAP) or synthetic velvet antler peptide (sVAP)), the presently claimed extracts are novel because they encompass multiple peptides, all of which are less than or equal to 10 kDa and induce proliferation of endothelial cells and/or promote angiogenesis. The unique combination of peptides present in the presently claimed extracts is able to induce proliferation of endothelial cells that make up endothelium lining internal surface of blood vessels and/or is able induce angiogenesis. TVAP, as taught by Weng et al., does not meet the limitations of the present claims since it contains substantial amounts of components that are greater than 10 kDa. On the other hand, the isolated peptides nVAP and sVAP do not meet the limitations of the claims since they are single purified peptides, in contrast to the presently claimed extracts with multiple components. Since neither TVAP nor nVAP/sVAP meet the limitations of the present claims, Weng et al. does not anticipate the presently claimed extracts. Accordingly, the Applicants respectfully request that the rejection under 35 U.S.C. § 102(b) be withdrawn.

### **Obviousness**

Claim 18 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Weng et al. (Supra) in view of Schultz (U.S. Publication No. 2003/0203001). The Examiner noted that Weng et al. does not teach a growth factor. Nevertheless, the Examiner found that it would have been obvious to combine the velvet antler polypeptides of Weng et al. with the epidermal growth factors of Schultz in order to formulate a third composition that can be applied for the treatment of wounds. However, as discussed above, the Weng et al. reference does not teach the presently claimed composition. Moreover, nothing in Weng et al. or Schultz would suggest to one having ordinary skill in the art that compositions having plural components from deer velvet, substantially none of which are greater than 10 kDa, could be extracted and isolated together. Accordingly, one of skill in the art could not have arrived at the presently claimed isolated extract. As such, the combination of references does not support the alleged *prima facie* obviousness. Accordingly, all of the presently pending claims, including Claim 18, are believed to be in compliance with 35 U.S.C. § 103(a) and the Applicants respectfully request that the rejection be removed.

### **Objection Relating to Duplicative Claims**

The Examiner maintained the objection that Claim 3 is an isolated extract of deer velvet, regardless of the method of purification. As such, the Examiner concluded that Claim 3 was duplicative of Claims 1 and 2. While not in agreement, the Applicants have canceled Claim 3, solely to expedite prosecution of the application.

In relation to Claim 5, the Examiner indicated that it was duplicative of Claim 4 since a persistent wound is just a wound. However, persistent (chronic) wounds are a specific class of wounds that do not heal in a predictable amount of time in orderly set stages. For example, wounds that do not heal within three months are often considered chronic. To clarify that persistent wounds are a subclass of wounds, the Applicants have amended Claim 5 to be dependent on Claim 4. As such, Claim 5 further limits the subject matter of Claim 4.

### **No Disclaimers or Disavowals**

Although the present communication may include alterations to the application or claims, or characterizations of claim scope or referenced art, Applicant is not conceding in this application that previously pending claims are not patentable over the cited references. Rather, any alterations or characterizations are being made to facilitate expeditious prosecution of this application. Applicant reserves the right to pursue at a later date any previously pending or other broader or narrower claims that capture any subject matter supported by the present disclosure, including subject matter found to be specifically disclaimed herein or by any prior prosecution. Accordingly, reviewers of this or any parent, child or related prosecution history shall not reasonably infer that Applicant has made any disclaimers or disavowals of any subject matter supported by the present application.

### **Co-Pending Applications of Assignee**

Applicant wishes to draw the Examiner's attention to the following co-pending applications of the present application's assignee.

<b>Docket No.</b>	<b>Serial No.</b>	<b>Title</b>	<b>Filed</b>
JAMES109.001APC	10/546123	LOW MOLECULAR WEIGHT EXTRACTION PROCESS	22-May-2006

Application No.: 10/555,043  
Filing Date: August 28, 2006

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

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